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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,590	10/25/2006	Keith Clark	03-0009/US1 (8470-69/NPB)	6065
29293 7590 09/29/2008 FREUDENBERG-NOK GENERAL PARTNERSHIP LEGAL DEPARTMENT 47690 EAST ANCHOR COURT PLYMOUTH, MI 48170-2455				
EXAMINER PATEL, VISHAL A				
ART UNIT		PAPER NUMBER		
3676				
NOTIFICATION DATE		DELIVERY MODE		
09/29/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

fngp@hdp.com
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Office Action Summary

Application No.

10/553,590

Applicant(s)

CLARK, KEITH

Examiner

Vishal Patel

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 and 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4, lines 1-3, "the..member", unclear how the seal portion has retainer mechanism and retainer portion?

Claim 7, line 5, "said sleeve", unclear what applicant is trying to claim by this, just portion of sleeve or sleeve and portion of sleeve? For examination the sleeve portion is the only thing claimed as similar to claim 1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackowski et al (US. 4,448,426).

Jackowski illustrates a unitized pinion seal for mounting between a first member and a second member rotatable relative to the first member (intended use, the unitized pinion seal is capable of being mounted to two members that are relatively rotating), the unitized pinion seal

having a sleeve portion (sleeve 156 having portion 168) adapted to mount rotationally fixed to the first member (intended use, the sleeve is capable of being mounted to a member) and a retainer portion (e.g. retainer portion 160 of 122) slidably mounted to the sleeve portion in a radial interference fit and adapted to mount to the second member (intended use, the retainer portion is capable of being mounted to a second member), a seal portion (e.g. 130) mounted to the retainer portion and engaging the sleeve portion (this is the case since the sleeve must engage to be provided in a groove 162 of the retainer portion), the retainer portion is disengaged from the sleeve portion during assembly of the sleeve portion on the first member (this would be the case since the member will disengage the back surface of 166 and be retained freely in groove 162). The engaging of the sleeve portion and the retainer portion occurs due to the portion 168 of the sleeve that snaps into a groove 162 of the retainer portion.

The first member is an axle companion flange (surface of shaft 112 that extends from the shaft end) and the second member is a carrier/bearing cage (22).

Claim 3 is clearly anticipated in view of the limitations disclosed by Jackowski et al, specifically a unitized pinion seal having a sleeve portion and a seal portion.

The seal portion includes a retainer mechanism engaging the sleeve member prior to assembly of the unitized pinion seal to the first member (this is the case as seen in figure 8).

The retainer mechanism includes a first retainer ring engaging seal body and a second retainer ring engaging the sleeve portion prior to assembly of the unitized pinion seal to the first member (this is the case since 106 is attached to lip 132 and also contacts the sleeve 104 or as seen in figures 12 and 3).

The method of installing the unitized pinion seal having steps of assembling a sleeve portion of the pinion seal to a seal portion of the pinion seal with a radial interference fit (as seen in figures 3, 8 and 12), assembling the pinion seal to the carrier/bearing cage (ass seen in figure 1), partially installing the axle companion flange into the sleeve portion while generating less axial installation force between the axle companion flange and the sleeve portion than an axial retention load created by the interference fit between seal portion and the sleeve portion (this is the case since the unitized union seal is placed in the bearing cage 22 without being taken apart, figure 1) and installing the axle companion flange into the sleeve portion while preventing further axial movement of the sleeve portion relative to the companion flange (this is the case as seen in figure 1), to thereby overcome the axial retention load and move the sleeve portion axially relative to the seal portion (this is the case since the pinion seal is unitized before and after being installed on the bearing cage or carrier)

Regarding claim 7: A unitized pinion seal having a sleeve portion (e.g. sleeve portion 156), the sleeve portion including an outer surface (e.g. outer surface of 156 that faces 130) having a ramp portion (e.g. 168) disposed between an axially extending forward portion (e.g. portion near 110) and an axially extending rear portion (portion near 168 extends both axially and radially due to thickness and length of the portion 168), the axially extending forward portion has a smaller diameter than the axially extending rear portion (see figure 8), a seal portion (e.g. 122) mounted to the sleeve portion in a radial interference fit and including a retainer portion (retainer portion 160 having groove 162), the seal portion including a first seal lip (lip e.g. 32) engaging the axially extending forward portion and a second sealing lip (e.g. lip that contacts surface of 156) engaging the axially extending rear portion.

5. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Romero et al (US. 5,186,472).

Romero discloses a unitized pinion seal having a sleeve portion having an outer surface having a ramp portion disposed between an axially extending forward portion and an axially extending rear portion (sleeve having two diameters), the axially extending forward portion (portion near 26 having a first diameter) having a smaller diameter than the axially extending rear portion (portion of 44), a seal portion (e.g. 18) mounted to the sleeve portion (the sleeve portion and the seal portion are unitized members) in a radial interference fit (e.g. figures 2-3) and including a retainer portion (e.g. 36 having 50) and the seal portion including a first seal lip (e.g. 48) engaging the axially extending forward portion and a second seal lip (e.g. 42) engaging the axially extending rear portion. Regarding claim 4, the retainer mechanism engaging the sleeve member prior to assembly of the unitized pinion seal to the first member (figure 2).

Response to Arguments

6. Applicant's arguments filed 6/9/08 have been fully considered but they are not persuasive.

Applicants' argument that the reference of Jackowski does not teach sliding engagement between the retainer portion and the sleeve portion that is disengaged during assembly is nor persuasive because it is clearly shown that when member is assembled the portion 168 would contact wall of 160 and then disengage and be retained in groove 162. This also provides function limitations of assembly as claimed in claim 3 and the method claim 6.

Applicants' argument that the reference of Jackowski does not disclose claim 6 is not persuasive because a force is required to make portion 168 contacts 160 and then minimal force is required when the portion 168 is retained in groove 162.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./
Primary Examiner, Art Unit 3676

/Vishal Patel/
Primary Examiner, Art Unit 3676